

CLAIMS

I claim:

1. A device for use in connection with a fabric in a former or a press section of a paper machine comprising subassemblies which accomplish at least two of the following functions: guiding, spreading and/or cleaning of the fabric and wherein the subassembly accomplishing the cleaning function of the fabric is sucking and that the subassemblies form a single device.

2. A device for use in connection with a fabric in a former or a press section of a paper machine, the device comprising a subassembly accomplishing a guiding function of the fabric and the device further comprising at least one subassembly which performs a spreading function and/or a cleaning function of the fabric and wherein the subassemblies form a single device.

3. The device of claim 2 wherein the device subassemblies comprise:
an automatic guide and a guide roll for guiding the fabric;
a curved spreader roll for spreading the fabric, and
a suction unit for cleaning the fabric.

4. The device of claim 2 wherein the cleaning function is performed by a subassembly including a suction unit having a suction slot which can be adjusted and wherein the suction slot is formed between two suction ribs.

5. The device of claim 4 wherein the suction ribs are plastic ribs.

6. The device of claim 4 wherein the suction ribs can be adjusted in position and bent.

7. The device of claim 2 further comprising an automatic guide having linear guides, a worm gear, a trapezoid-thread screw, and a movement base.

8. The device of claim 2 wherein the at least one subassembly performing a spreading function comprises a spreader roll formed of rollers having adjustable bearing housings placed in spaces therebetween in order to adjust the curvature of the spreader roll.

9. The device of claim 8 wherein the curvature of the spreader roll of the device is regulated by adjusting the height position of the bearing housings.

10. The device of claim 2 wherein the subassembly accomplishing the guiding function of the fabric comprises a guide roll formed of rollers having bearings placed therebetween.

11. The device of claim 2 wherein suction pipes are arranged in connection with a suction chamber of a suction unit of the device, one of said tubes extending to a tending side and the other to a driving side.

12. The device of claim 2 wherein the cleaning function is performed by a subassembly including a suction unit having a suction slot, and wherein end seals of the suction slot are based on an adjustable overlapping joint.

13. A device for use in connection with a fabric in a former or a press section of a paper machine, the device comprising:

a suction unit part having portions defining a suction chamber;

at least one suction pipe extending from the suction chamber;

5 a first bendable rib and a second bendable rib connected to the suction unit part to define a slot therebetween in communication with the suction chamber;

a spreader roll mounted to the suction unit part upstream of the slot, the spreader roll having a plurality of rollers adjustable to be curved; and

10 a guide roll mounted to the suction unit part downstream of the slot, wherein the device is positioned such that the fabric passes over the spreader roll, across the first rib, the slot, and the second rib, and across the guide roll.

14. The device of claim 13 wherein the first bendable rib and the second bendable rib are formed of plastic.

15 15. The device of claim 13 wherein the spreader roll rollers are mounted on adjustable bearing housings, for relative displacement of the spreader rollers.

16. The device of claim 13 wherein the first bendable rib and the second bendable rib are curved with respect to the fabric, such that the fabric as it passes over the ribs does not run straight, but is drawn into a curve.

20 17. The device of claim 13 wherein the guide roll is comprised of a plurality of rollers, adjustable to be curved.

18. A device for use in connection with a fabric in a former or a press section of a paper machine, the device comprising:

a means for guiding the fabric;

a means for spreading the fabric; and

5 a means for cleaning the fabric, wherein the means for guiding, the means for spreading, and the means for cleaning are connected to one another.

19. The device of claim 18 wherein the means for cleaning comprises: portions defining a suction chamber; and

10 a first rib and a second rib spaced from one another in a machine direction to define a suction slot over which the fabric travels.

20. The device of claim 19 wherein the ribs are plastic.

21. The device of claim 19 wherein the suction ribs are bendable and can be adjusted in position.